

WHAT IS CLAIMED IS:

1. A motion control method of a vehicle provided with a transfer ratio variable mechanism for changing a transfer ratio by driving a gear ratio variable motor, and an assist motor assisting a steering force on the basis of a steering torque
5 ~~generated in an output shaft of the transfer ratio variable mechanism, in the~~
middle of a steering transfer system connecting a steering wheel and steered wheels, comprising:
 - a first step of detecting a rotation angle θ_{pm} of said assist motor;
 - a second step of detecting a rotation angle θ_{vm} of said gear ratio variable
10 motor; and
 - a third step of determining a steering angle of said steering wheel on the basis of the rotation angle θ_{pm} detected in accordance with said first step and the rotation angle θ_{vm} detected in accordance with said second step,
wherein said transfer ratio variable mechanism is controlled on the basis
15 of the steering angle of said steering wheel determined in accordance with said third step.
2. A motion control method of a vehicle as claimed in claim 1, wherein the rotation angle is input via a speed reducing means to at least one of the detection of the rotation angle θ_{pm} in accordance with said first step and the rotation
20 angle θ_{vm} in accordance with said second step.
3. A motion control apparatus of a vehicle provided with a transfer ratio variable mechanism for changing a transfer ratio by driving a gear ratio variable motor, and an assist motor assisting a steering force on the basis of a steering torque generated in an output shaft of the transfer ratio variable mechanism,
25 in the middle of a steering transfer system connecting a steering wheel and steered wheels, comprising:
 - a first rotation angle detecting means for detecting a rotation angle θ_{pm} of said assist motor;
 - a second rotation angle detecting means for detecting a rotation angle
30 θ_{vm} of said gear ratio variable motor; and
 - a steering angle computing means for determining a steering angle of said steering wheel on the basis of the rotation angle θ_{pm} detected by said first rotation angle detecting means and the rotation angle θ_{vm} detected by said second rotation angle detecting means,
35 wherein said transfer ratio variable mechanism is controlled on the basis of the steering angle of said steering wheel determined by said steering angle computing means.
4. A motion control method of a vehicle as claimed in claim 3, wherein the rotation angle is input via a speed reducing means to at least one of said first
40 rotation angle detecting means and said second rotation angle detecting means.